Date: Wed, 10 Mar 93 04:30:04 PST
From: Packet-Radio Mailing List and Newsgroup <packet-radio@ucsd.edu>
Errors-To: Packet-Radio-Errors@UCSD.Edu
Reply-To: Packet-Radio@UCSD.Edu
Precedence: Bulk
Subject: Packet-Radio Digest V93 #63
To: packet-radio

Packet-Radio Digest   Wed, 10 Mar 93   Volume 93 : Issue   63

Today's Topics:

AEA TNC-1 ???
Alinco DJ-F1T / Mic connector for packet - help
GLB TNC-2A (2 msgs)
K9NG modem and 1270b (2 msgs)
Packet radio for the Amiga?
PK232-MBX for sale
TCP/IP for 386BSD. (3 msgs)
TNC (KPC-3) to Alinco 160
What happened to MIR?
What is best radio to use for 9600 buad?

Send Replies or notes for publication to: <Packet-Radio@UCSD.Edu>
Send subscription requests to: <Packet-Radio-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Packet-Radio Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/packet-radio".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 9 Mar 93 11:13:57 +1100
From: munnari.oz.au!manuel.anu.edu.au!sserve!hhcs.gov.au!hhcs.gov.au!
news@uunet.uu.net
Subject: AEA TNC-1 ???
To: packet-radio@ucsd.edu

In article <2652@sousa.tay.dec.com> , segrest@bobseg.enet.dec.com writes:

> The PKT-1 appears to be a tapr-1 clone or something quite similar. It does ok
> displaying ascii text in an ax25 packet but goes nuts (displays trash) when it
> receives anything else.

> Is there any firmware available that will allow this tnc to run in kiss mode?

Yes there is. Look in the /hamradio/packet/tcpip/tnc1 directory on
ucsd.edu. There is code there.

We're using a TNC-1 at 4800 baud quite nicely locally. :-)

Carl.

```
--
Carl Makin (VK1KCM)
Internet:     makinc@hhcs.gov.au
Amprnet:      vk1kcm@vk1kcm.act.aus.oc
"Life is something to do when you can't get to sleep."
                          - Fran Lebowitz
```

Date: 9 Mar 93 19:55:23 GMT
From: usc!howland.reston.ans.net!spool.mu.edu!hri.com!noc.near.net!
saturn.caps.maine.edu!maine.maine.edu!io30399@network.UCSD.EDU
Subject: Alinco DJ-F1T / Mic connector for packet - help
To: packet-radio@ucsd.edu

As posted above - I have a DJ-F1T trying to hook it up for
packet. But can't seem to get the mike connector right. Could
some one post how the F1-T's PTT and mike input work - meaning
is it a two or three conductor plug and which conductor is the PTT.
Any help would at least eliminate some possibilities.
Thanks -Damon Kiesow - N1OJG - 207-866-5976

Date: Mon, 8 Mar 1993 05:31:56 CST
From: dog.ee.lbl.gov!pasteur!agate!spool.mu.edu!sol.ctr.columbia.edu!eff!
news.oc.com!utacfd.uta.edu!rwsys!ricksys!news@network.UCSD.EDU
Subject: GLB TNC-2A
To: packet-radio@ucsd.edu

I was given a (used)GLB TNC-2A for Christmas and Just got it on the air.
At first it locked up if you breathed on it but I found a loose jumper
and soldered it and now it's stable. The manual I got was for an MFJ
(photocopied I think) but it seems to have the same commands.
Apparently it doesn't have a Mailbox, can I upgrade the firmware to a
level that does?
The following it what it says on powerup; can I get something from TAPR?

```
Tucson Amateur Packet Radio TNC 2
AX.25 Level 2 Version 2.0
Release 1.1.3  03/30/86 - 16K RAM
```

```
Checksum $3E
cmd:
```

--
Internet(MX): rick@ricksys.lonestar.org
If I bounce (the maps have errors that I have no control over) then use

```
        bo836@cleveland.freenet.edu          or  ah053@yfn.ysu.edu
BITNET: bo836%cleveland.freenet.edu@cunyvm   or  ah053%yfn.ysu.edu@ysub
```

Date: Tue, 9 Mar 1993 13:45:29 GMT
From: usc!howland.reston.ans.net!gatech!wa4mei!ke4zv!gary@network.UCSD.EDU
Subject: GLB TNC-2A
To: packet-radio@ucsd.edu

In article <930308.053156.4j8.rusnews.w165w@ricksys.lonestar.org>
rick@ricksys.lonestar.org (Richard McCombs KB5SNF) writes:

```
>I was given a (used)GLB TNC-2A for Christmas and Just got it on the air.
>At first it locked up if you breathed on it but I found a loose jumper
>and soldered it and now it's stable.  The manual I got was for an MFJ
>(photocopied I think) but it seems to have the same commands.
>Apparently it doesn't have a Mailbox, can I upgrade the firmware to a
>level that does?
>The following it what it says on powerup; can I get something from TAPR?
>
>Tucson Amateur Packet Radio TNC 2
>AX.25 Level 2 Version 2.0
>Release 1.1.3  03/30/86 - 16K RAM
>Checksum $3E
>cmd:
```

Yes. This unit is a licensed copy of the original TNC2. TAPR firmware will work. The most recent releases of the TAPR firmware require a RAM upgrade to 32 kb. Your unit should have a jumper to allow this. TAPR was selling the extra RAM chip too, but I don't know if they still have them in stock. If not, Digikey or Microprocessors Unlimited will have the chips in stock.

Gary

```
--
Gary Coffman KE4ZV          |    You make it,     | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems |    we break it.     | uunet!rsiatl!ke4zv!gary
534 Shannon Way             |    Guaranteed!      | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244     |                     |
```

Date: Tue, 9 Mar 1993 08:06:02 GMT
From: agate!spool.mu.edu!darwin.sura.net!rouge!cfm1471@ames.arpa
Subject: K9NG modem and 1270b
To: packet-radio@ucsd.edu

Ok, just got my 9600b K9NG modem working with my 1270b. I have only one problem. It seems to be operating in fullduplex mode. I am running the newest version of wg7j's JNOS, and have checked all of the params that are in autoexec.nos. I have also for the sake of arguments, made sure that fulldup is off in the terminal mode as well.

This is the deal, during an ftp, the sending station will send its 1024 "packet" and i am to "ack" twice. Whats happening is im receiving the entire packet, but 3/4's of the way through it, before its finished sending it, i will ack it, causeing it to miss the first of the two acks, and the sender will retry on the first, and i will ack it then. DCD is showing a slight flicker, from lack of full sig on transmitting station, but it cant be this (or could it be??) because the on/off period is not long enough for slot and persist the even thing about generating an ack. This flicker is only slight. In actuallity, i think its probably doing the same thing on super-strong stations, so it must not be this. Note, on ax25 connects, it will NOT collide, but maybe because of the limit of the 256 paclen.

So basically this, im getting collisions and i dont know why. Any answers?

HELP ME!!! PLEASE!!!

```
=============================================================================
| Charles Morrison       | cfm1471@ucs.usl.edu   | These are my views,      |
| KI5XP                  | ki5xp@ucs.usl.edu     | NOT anyone elses!        |
| U. of S'Western        | ki5xp@ki5xp.aara.org  | But who cares?           |
|     La.                | KI5XP @ K5ARH.LA      |                          |
| Lafayette, La 70506    |                       |                          |
=============================================================================
```

Date: 9 Mar 93 09:54:45
From: idacrd.ccr-p.ida.org!idacrd!n4hy@uunet.uu.net
Subject: K9NG modem and 1270b
To: packet-radio@ucsd.edu

The K9NG modem is INCAPABLE of operating in the fullduplex mode. It was its major drawback.

Bob

```
--
------------------------------------------------------------------------------
Robert W. McGwier                  | n4hy@ccr-p.ida.org
Center for Communications Research | Interests: amateur radio, astronomy,golf
Princeton, N.J. 08520              | Asst Scoutmaster Troop 5700, Hightstown
```

Date: 9 Mar 93 17:59:23 GMT
From: news.cerf.net!pagesat!olivea!spool.mu.edu!howland.reston.ans.net!wupost!
bigboy.sbc.com!news.mtholyoke.edu!news.unomaha.edu!cwis.unomaha.edu!
rerickso@network.UCSD.EDU
Subject: Packet radio for the Amiga?
To: packet-radio@ucsd.edu

I believe the 500 might work with an C-64 emulator which would make it possible for you to use Baycom or Digicom/64 software. If you use Digicom/64 software, try to use Version 3.51A as it seems to be bug free. I have no experience with Baycom so I can not comment on it.

Ron
AK0N

Date: 8 Mar 93 20:04:00 GMT
From: agate!spool.mu.edu!sdd.hp.com!crash!filebank!drew.dwyer@ames.arpa
Subject: PK232-MBX for sale
To: packet-radio@ucsd.edu

To: drew=cpptssac%mqg1@mqg1.usmc.mil

From: crisp@ecsvax.uncecs.edu (Russ Crisp)
Message-ID: <1993Mar4.140538.18812@ecsvax.uncecs.edu>
Date: Thu, 4 Mar 1993 14:05:38 GMT

Hello.

I have a PK232-MBX TNC for sale.

The PK232-MBX is less than a year old, and comes in the original box with all documentation. The packet bug bit me, but I didn't get the fever. This unit has seen very little action, in new condition. Functions nicely as a TNC, a has many other capabilities such as AMTOR, RTTY, several FAX modes, etc. Will send as well as

receive these modes. Has mailbox capability. I'll even in throw
in the cables I built to connect the unit to the PC. I paid over
$300 for this one just a short time ago, and they haven't gotten
any cheaper..

Price: $250.00

If you want more info, or want to make an offer, drop me a note!

Thanks,
Russ Crisp
Systems Analyst
Western Carolina University

 . OLX 2.2 . All wiyht. Rho sritched mg kegtops awound?

```
*-----------------------------------------------------------------------------*
| The File Bank BBS - 619-728-4318 - PCBoard v.14.5a/E10 - USR HST & DS      |
| 8 nodes / RIME / Internet / Largest Clipper file collection in the world |
*-----------------------------------------------------------------------------*
```

Date: Tue, 9 Mar 1993 16:33:03 GMT
From: email!kkudielk@uunet.uu.net
Subject: TCP/IP for 386BSD.
To: packet-radio@ucsd.edu

There exists a SunOS driver which does the Ethernet-to-KISS conversion.
Get /hamradio/packet/tcpip/sun/ax25ip.shar from ucsd.edu.

Regards,
Klaus Kudielka OE1KIB
kkudielk@email.tuwien.ac.at

Date: 9 Mar 1993 19:29:27 GMT
From: ucsd.edu!brian@network.UCSD.EDU
Subject: TCP/IP for 386BSD.
To: packet-radio@ucsd.edu

Adding AX.25 to 386BSD as a native protocol with the ability to encapsulate
TCP/IP takes modifications to about half a dozen utilities, about 30 new
module files in the kernel, and extensive reconstruction of lots of the
various protocol structures in the kernel.

A large part of the problem is that although Berkeley made the code quite modular and table/parameter driven, they made some assumptions (such as the existence of datagram and connected modes as separate protocols, and that addresses would fit into 32 bits) that simply don't work with AX.25.

A good part of the blame for that goes on the shoulders of the designers (?) of AX.25, but there is some shortsightedness in the BSD kernel as well. For example, the ARP table just can't cope as it's currently constructed.

Additionally, the problems of multiport transport-level routing isn't yet solved in ANY implementation of AX.25, so the 386BSD port doesn't do that either.

That's about the point where I got distracted and stopped working on the project. There's a lot to still be done.

However, don't let that stop you from trying. More power to you!
     - Brian

Date: 9 Mar 93 21:09:34 GMT
From: sdd.hp.com!elroy.jpl.nasa.gov!ncar!vexcel!copper!mercury.cair.du.edu!
mnemosyne.cs.du.edu!nyx!jmaynard@network.UCSD.EDU
Subject: TCP/IP for 386BSD.
To: packet-radio@ucsd.edu

In article <1nir6nINNsmp@network.ucsd.edu> brian@ucsd.edu (Brian Kantor) writes:
>they made some assumptions (such as [...]
>that addresses would fit into 32 bits) that simply don't
>work with AX.25.

This assumption, at least, will have to go by the wayside as well; it's becoming increasingly clear that 32-bit addresses on the Internet will have to be extended in some fashion.
--
Jay Maynard, EMT-P, K5ZC, PP-ASEL | Never ascribe to malice that which can
jmaynard@oac.hsc.uth.tmc.edu | adequately be explained by stupidity.
        You won't see this on TV: (video of Mount Carmel compound)
        "This is David Koresh, of Waco, Texas. He cannot be seen."

Date: 9 Mar 1993 19:05:15 GMT
From: noc.near.net!news.bbn.com!bbn.com!levin@uunet.uu.net
Subject: TNC (KPC-3) to Alinco 160
To: packet-radio@ucsd.edu

Does anyone have the proper way to wire an Alinco DJ(or whatever)-160
2 meter handi to a Kantronic KPC-3?

I successfully wired the Radio Shack HTX-202. It seems to be
Yaesu-like; I used the diagram and the capacitor/resistor values given
for a Yaesu HT in the KPC-3 manual. I'd like to hook up my Alinco,
but the mike plug on my Alinco speaker-mike is a 3-conductor sub-mini
while the Yaesu and the HTX-202 use a two conductor plug. The KCP-3
book gives no hints about Alincos or about any three-wire mike cables.

Does anyone have any information on this?

Thanks

73 / JBL N1MNF/AA

```
=
Nets: levin@bbn.com  |  "GO TO JAIL.  Go directly to jail. Do not pass
POTS: (617)873-3463  |  Go.  Do not collect $200."
              N1MNF  |           -- Parker Brothers
```

Date: Mon, 8 Mar 1993 05:26:53 CST
From: mvb.saic.com!unogate!news.service.uci.edu!usc!howland.reston.ans.net!
spool.mu.edu!sol.ctr.columbia.edu!eff!news.oc.com!utacfd.uta.edu!rwsys!ricksys!
news@network.UCSD.EDU
Subject: What happened to MIR?
To: packet-radio@ucsd.edu

fred-mckenzie@ksc.nasa.gov (Fred McKenzie) writes:

> I've had a TNC sitting on 145.550 MHz for several days now, and haven't
> heard a peep out of MIR. Since yesterday, there were a couple of
> nearly-overhead passes. Did they change frequency?

Maybe it was on voice. I know a local guy that talked to them on voice
recently.

```
--
Internet(MX): rick@ricksys.lonestar.org
If I bounce (the maps have errors that I have no control over) then use
        bo836@cleveland.freenet.edu          or  ah053@yfn.ysu.edu
BITNET: bo836%cleveland.freenet.edu@cunyvm   or  ah053%yfn.ysu.edu@ysub
```

Date: Tue, 9 Mar 1993 07:47:11 GMT
From: pacbell.com!sgiblab!darwin.sura.net!rouge!cfm1471@network.UCSD.EDU
Subject: What is best radio to use for 9600 buad?
To: packet-radio@ucsd.edu

Try a General Electric MVP. We have plenty of em on a network and they
work great, not to mention that they take PLENTY of lightning hits and
are still going. One strike took out both tnc's and comport, but radio
is like a timex.
BTW: Cheap as heck and easy to mod!

Charlie

```
============================================================================
| Charles Morrison            | cfm1471@ucs.usl.edu   | Oh let the sun beat   |
| KI5XP                       | ki5xp@ki5xp.aara.org  | down upon my face!    |
| University of S'Western     | KI5XP @ K5ARH.LA      |      -Led Zeppelin    |
|          La.                |                       | (We miss you John!)   |
| Lafayette, La. 70506        |                       |                       |
============================================================================
```

Date: Tue, 09 Mar 93 14:47:48 GMT
From: csus.edu!netcom.com!netcomsv!orchard.la.locus.com!prodnet.la.locus.com!
lando.la.locus.com!dana@decwrl.dec.com
To: packet-radio@ucsd.edu

References <araichel.730867050@cser>, <1993Mar4.153203.17965@nebulus.ampr.ab.ca>,
<1993Mar9.074711.12621@usl.edu>od
Subject : Re: What is best radio to use for 9600 buad?

In article <1993Mar9.074711.12621@usl.edu> cfm1471@ucs.usl.edu (Morrison Charles
F) writes:
>Try a General Electric MVP. We have plenty of em on a network and they
>work great, not to mention that they take PLENTY of lightning hits and
>are still going. One strike took out both tnc's and comport, but radio
>is like a timex.
>BTW: Cheap as heck and easy to mod!

The GE Custom MVPs are very good radios. I have a GaAsFET preamp on the one
I use at home; it ends at least as hot as a Japanese radio but extremely
resistant to intermod. If the radio was located in a radio site with
other transmitters, I'd probably remove the pre-amp.

However, since the MVP exciter is phase modulated, how do you run the
radio at 9600 baud? The temperature control line to the transmit rock
doesn't appear to pull the frequency far enough or linearly enough to

use as a modulation point. I guess it might be possible to change the varactor/capacitor combination on the channel element, but I'm curious as to what you've done. My MVP is used for 1200 baud packet.

As for another "good" 9600 baud radio, the Motorola Maxar-80 or Flexar radios are direct FM, compact, and use only crystals, not channel elements. They are almost plug/play for 9600 baud; you can even use some pins on the big Molex connector to connect the 9600 baud modem up.

Also, I've heard success stories with the UHF Micors, which are also direct FM modulated.

--
 * Dana H. Myers KK6JQ | Views expressed here are *
 * (310) 337-5136 | mine and do not necessarily   *
 * dana@locus.com DoD #466 | reflect those of my employer
     *
 * This Extra supports the abolition of the 13 and 20 WPM tests *

Date: Tue, 9 Mar 1993 13:51:48 GMT
From: usc!howland.reston.ans.net!gatech!wa4mei!ke4zv!gary@network.UCSD.EDU
To: packet-radio@ucsd.edu

References <araichel.730867050@cser>, <1993Mar4.153203.17965@nebulus.ampr.ab.ca>, <1993Mar9.074711.12621@usl.edu>,
Reply-To : gary@ke4zv.UUCP (Gary Coffman)
Subject : Re: What is best radio to use for 9600 buad?

In article <1993Mar9.074711.12621@usl.edu> cfm1471@ucs.usl.edu (Morrison Charles F) writes:
>Try a General Electric MVP. We have plenty of em on a network and they
>work great, not to mention that they take PLENTY of lightning hits and
>are still going. One strike took out both tnc's and comport, but radio
>is like a timex.
>BTW: Cheap as heck and easy to mod!

The MVP is a wonderful radio. It makes a fine repeater at a high RF site as well. For 9600 baud packet, you can't feed the tones into the microphone input. The audio shaping filters wreck it. You can feed the tones into the Channel Guard input, however, and it works just fine. The only caution is that the CG input is not gain limited and you have to be careful not to over deviate the transmitter.
The CG input also has no pre-emphasis so you can run into tone twist problems with some amateur radios unless they are taking the audio output directly from the discriminator. This is a good practice for 9600 baud in any event however. You can pick up CG in and out at

P9 on the audio board.

Gary

```
--
Gary Coffman KE4ZV          |    You make it,     | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems |    we break it.     | uunet!rsiatl!ke4zv!gary
534 Shannon Way             |    Guaranteed!      | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244     |                     |
```

End of Packet-Radio Digest V93 #63
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